

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0001] at page 1 as follows:

[0001] The present invention relates to a method of manufacturing a nitride semiconductor, and, more particularly, a crystal growth method of a nitride semiconductor wherein a nitride semiconductor [[are]] is grown on a nitride buffer layer including ~~aluminums~~ aluminum so that it is possible to improve electrical and crystalline characteristics.

Please amend paragraph [0006] starting at page 2, line 2 as follows:

[0006] Improving the ~~characters~~ characteristics of the films of the nitride semiconductors is due to the development of growth technology of the nitrides.

Please amend paragraph [0009] starting at page 2, line 10 as follows:

[0009] Fig. 1 is shown a cross-sectional view of the stacking structure including the nitride semiconductors grown as a conventional method of crystal growth, which comprise the process of growing the buffer layer of the bivalent nitride (11) on the upper substrate of sapphire (10) and the process of growing the layers of the nitride semiconductor (12) on said ~~group-2~~ Group-2 nitride buffer layers.

Please amend paragraph [0010] starting at page 2, line 15 as follows:

[0010] The necessity of the buffer layer is due to the difference between thermal expansion and the lattice constant of a sapphire substrate and the nitride which grows on [[said]] the sapphire substrate (10). Namely, to overcome the differences of [[said]] the thermal expansion and the lattice constant between the nitrides and the sapphire substrate (10), the nitride semiconductor (12) is grown after the layer of bivalent nitride (11) which is selected [[in]] from GaN, AlN, InN and SiNx or the compounds thereof, is grown on a sapphire substrate (10), as shown Fig. 1.

Please amend paragraph [0013] starting at page 3, line 8 as follows:

[0013] Therefore, in order to get [[the]] a nitride semiconductor layer with the improved crystalline characteristics, a new growth method or development of a new buffer layer is necessary, and this is the core for the improved function of the final product, [[I.e.]] i.e., elements.

Please amend paragraph [0015] starting at page 3, line 17 as follows:

[0015] The present invention provides a method of manufacturing of nitride semiconductor layer ~~comprising;~~ the comprising: a first step of growing

a buffer layer including aluminum on the top of sapphire substrate; [[the]] a second step of growing bivalent nitride buffer layers on the top of said nitride buffer layers including aluminum; and ~~the cathode ray tube~~ for a third step of growing a nitride semiconductor on the top of said bivalent nitride buffer layers.

Please amend paragraph [0027] starting at page 5, line 18 as follows:

[0027] Fig. 2 is a cross-sectional view of a stacking structure of the nitride semiconductor layer grown by the crystal growth method following the first embodiment of the present invention. The nitride buffer layer (21) is grown on the top of the sapphire substrate (20) and then, a bivalent nitride buffer layer (22) is grown on the [[said]] nitride buffer layer (21) including aluminum. After that, a nitride semiconductor (23) is grown on the top of [[said]] the bivalent nitride buffer layer (22).

Please amend paragraph [0031] starting at page 6, line 11 as follows:

[0031] The effect for adding Indium (In) at the buffer layer is to complement the nitrides having high hardness relatively (because In is ductile) and also to hinder generating dislocation and electric wave.

Please amend paragraph [0041] starting at page 6, line 10 as follows:

[0041] In addition, a carrier mobility of GaN layer grown by the crystal growth method of the present invention is improved by 50 % at maximum, and carrier density is decreased about ~~(Mid)10¹⁶ ~ (High)10¹⁶cm⁻³~~ (Mid)10¹⁶ ~ (High)10¹⁶cm⁻³.

Please amend paragraph [0043] starting at page 6, line 10 as follows:

[0043] The present invention relates to a crystal growth method of nitride semiconductor in which a nitride compound semiconductor are grown at an upper portion of the nitride compound buffer layer including ~~aluminums~~ aluminum so that it is possible to improve ~~in characters~~ characteristics for electricity and crystallization.